



TN. DIV. OF
AIR POLLUTION CONTROL

2015 MAY 26 AM 11:13

5/20/15

Certified Mail – 7005 1820 0006 6896 0316

Mr. Barry Stephens
Technical Secretary
Tennessee Division of Air Pollution Control
William R. Snodgrass-Tennessee Tower
312 Rosa L. Parks Ave. - 15th Floor
Nashville, TN 37243

RECEIVED

RE: Operational Flexibility Request/Flush Glazing Process Additional Adhesive Use
Emission Source Reference # 22-0079- & Permit #061174P
Masonite Corporation – One Premdor Drive, Dickson, TN 37055

Dear Mr. Stephens:

Per the Tennessee Division of Air Pollution Control Standards Chapter 1200-03-02-.01 (1)(aa) 4, Masonite Corporation (Masonite) is submitting this letter as notification of an operational flexibility request for the Masonite facility listed above. Specifically, notification of use of adhesive for the flush glazing process for hurricane rated doors. The facility plans to make the addition June 11, 2015.

Regulatory History

Masonite submitted a request for operational flexibility for the flush glazing process on September 19, 2014 and was granted approval on September 30, 2014. Masonite indicated that at that time, the adhesive for a smaller part of the process had not yet been identified. Specifically, a different type of adhesive that would need to be used for hurricane impacted doors. Masonite has now identified the product that will be used in this process; Bostik, Inc. 70-05A adhesive.

Hurricane Door Process/Adhesive

The adhesive, Bostik, Inc. 70-05A (see attached Material Safety Data Sheet (MSDS) & Technical Data Sheet) will be applied to the hurricane doors via a battery operated hand caulking gun. The annual use of the adhesive is anticipated to be 2,264 pounds. According to and confirmed with Bostik, Inc. technical staff, the Methyl Alcohol is not an actual component of the process. It is listed as only being formed during the natural curing process. The anticipated emissions from this by-product are very low and are indicated on the MSDS as less than 30g/l.

This source is not subject to requirement of paragraphs 1200-03-09.02(11), 1200-03-09-.01(4) and 1200-03-09-.01(5). This change will not result in emissions exceeding the emissions allowable under the existing operating permit, nor will it result in any air contaminant (to which an emission standard applies) not previously emitted.

Masonite Corporation
One Premdor Drive, Dickson, TN, USA 37055 • Telephone: (615) 446-6220 • Fax: (615) 441-4226

www.masonite.com

Based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete. Should you have any questions or require more information, please contact either myself at (615) 441-4237 or ecannon@masonite.com or Rick Smith, at (620) 232-4740 or rsmith@masonite.com.

Sincerely,

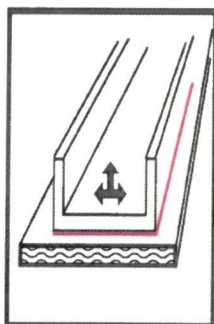
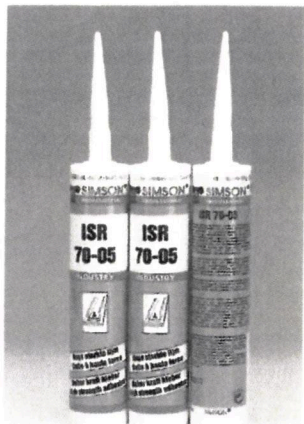
A handwritten signature in dark ink, appearing to read 'EC', with a long horizontal flourish extending to the right.

Eric Cannon
Plant Manager
Masonite Corporation

Cc: Rick Smith – Masonite Corporation
Cathy Chaberski – Masonite Corporation

Attachments: Bostik 770-05A MSDS & Technical Data Sheet

INDUSTRIAL SPECIAL RANGE



Bostik® 70-05A



ISR 70-05

The Simson Industrial Special Range is a range of high tech quality products especially developed for industrial applications.

PRODUCT

Bostik® 70-05A / Simson ISR 70-05 is a Silyl Modified Polymer (SMP) based adhesive with a higher green strength and higher tensile strength as Bostik® 70-05A / Simson ISR 70-03 and is suitable for making elastic constructive joints. Bostik® 70-05A / Simson ISR 70-05 can also be used as a sealant.

APPLICATIONS

- Elastic bondings and sealings: bus, caravan, train and truck construction
- Bonding of roofs on busses, trains, trucks
- Bonding of corner profiles of aluminium or polyester on trailers
- Bonding of polyester parts on metal frames
- Bonding of floor systems

FEATURES

- Solvent-, isocyanate- and PVC-free
- Very good UV-resistance and ageing properties
- In general, good adhesion on several substrates without the use of a primer
- Permanent elastic within temperatures from -40°F to 248°F (-40°C to +120°C)
- Neutral, odorless and fast curing
- Paint compatible with most industrial paint or lacquer systems, both alkyd resin and dispersion based (due to the large scale of different types of industrial paints a paint compatibility test is recommended)
- Paintable after skin forming (wet-on-wet); this will not influence the cure rate.

ADHESION

In general, Bostik® 70-05A / Simson ISR 70-05 adheres well without primer on clean, dry, dust and grease free substrates of aluminium, stainless steel, galvanised steel, zinc, copper, brass, powder coated metal, most lacquered metal surfaces, glass, PVC, polyester (GRP), painted and lacquered wood, etc. No adhesion on untreated polyethylene, polypropylene and teflon. In those cases where due to great thermal or physical loads, especially under wet conditions, high adhesion demands are needed, the use of Simson Primer M is recommended. Simson Primer M is a so called "wash primer" and degreases and prepares the surface of the substrate in one step. On plain, untreated wooden surfaces and other porous substrates Simson Primer P is recommended. For more details concerning Simson Primer M and Simson Primer P consult the specific technical information data sheet. For substrates not mentioned and for additional information consult Bostik Findley.

METHOD OF USE

Bostik® 70-05A / Simson ISR 70-05 can easily be extruded with a hand- or air pressure gun at temperatures between 41°F to 95°F (+5°C to 35°C). In sealing applications Bostik® 70-05A / Simson ISR 70-05 should be tooled or smoothened within 10 minutes (70°F/20°C @ 50% R.H.) with a spatula or putty knife, occasionally moistened with a soap solution. Avoid soap solution penetrating between joint sides and sealant, because this will create loss of adhesion. In bonding applications, the substrates have to be assembled within 15 minutes (70°F/20°C @ 50% R.H.) after applying Bostik® 70-05A / Simson ISR 70-05. In general an adhesive thickness of 2 mm is recommended.

Bostik® 70-05A / Simson ISR 70-05

At a temperature of 70°F (20°C) and a relative humidity of 50%, Bostik® 70-05A / Simson ISR 70-05 can be painted with the most industrial paints already 10 minutes after application. Best adhesion of paint coats is generally obtained if painted within 4 hours after applying Bostik® 70-05A / Simson ISR 70-05. Cleaning tools or removing uncured residue of Bostik® 70-05A / Simson ISR 70-05 can be done with a clean colorless cloth, wetted with Isopropyl alcohol. It is recommended to make a trial first to check possible attack of the substrate by Isopropyl alcohol.

TECHNICAL DATA

Basic Material	Silyl Modified Polymer (SMP)	
Curing Method	Moisture	
Specific Gravity	ca. 1.5 g/ml	
Skin Forming Time	ca. 10 min.	(70°F/20°C @ 50% R.H.)
Open Time	< 15 min.	(70°F/20°C @ 50% R.H.)
Cure Rate after 24 hrs.	0.125 in. (ca. 3 mm)	(70°F/20°C @ 50% R.H.)
Shore A Hardness	ca. 60	(DIN 53505)
Volume Change	< 3%	(DIN 52451)
Green Strength	ca. 500 Pa	(Physical Rheometer MC100)
(maximum load which can be applied per m² uncured adhesive without sagging)		
Tensile Stress (100%)	390 psi (ca. 2.7 MPa)	(DIN 53504/ISO 37)
Tensile Stress @ Break	500 psi (ca. 3.5 MPa)	(DIN 53504/ISO 37)
Elongation @ Break	ca. 200%	(DIN 53504/ISO 37)
Shear Stress	435 psi (ca. 3.0 MPa)	(DIN 53283/ASTM D1002)
(Aluminum-to-Aluminum; adhesive thickness 2mm, test speed 50 mm/min.)		
Tear Propagation	ca. 17 N/mm	(DIN 53515/ISO 34)
(Type C, test speed 500 mm/min.)		
E-Modulus(10%)	700 psi (ca. 4.8 MPa)	(DIN 53504/ISO 37)
Solvent Percentage	0%	
Isocyanate Percentage	0%	
Temperature Resistance	-40°F to 248°F (-40°C to +120°C)	
Temperature Resistance	356°F (+180°C)	(max. 1/2 hr)
Application Temperature	41°F to 95°F (+5°C to +35°C)	
UV and Weather Resistance	Excellent	
Colors (Standard)	White, Black	
Packaging (Note: Sizes subject to change):	Bostik® 70-05A —20 oz. sausage, 52 gallon drum Simson ISR 70-05 —290 ml cartridge, 600 ml sausage, 20 L pail, 200 L drum	

STORAGE STABILITY

Bostik® 70-05A / Simson ISR 70-05 may be stored for 12 months in a closed (unopened) container in a dry place at temperatures between 41°F to 86°F (+5°C and +30°C); (cartridges 18 months).

SAFETY PRECAUTIONS

No specific safety precautions required. Consult safety data sheet.

TRANSPORT CLASSIFICATION

Not applicable.

Distributed by / Distributed by:

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Middleton, MA 01949-2128 USA
Technical Service: 800-7/BOSTIK
FAX: 978-750-7293
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IMPORTANT NOTICE

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Manufactured by:

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E-mail: info@bostik.nl
Internet: www.bostik.nl

All figures, recommendations and safety precautions are based on thorough investigations and our actual experience and are without engagement. Although the documentation has been set up with most carefulness, we do not accept any responsibility for mistakes, inaccuracies or printer's errors. We reserve the right to adjust the product, whenever we feel necessary. Because the design, the quality of the substrate and the conditions during application fall beyond our control, no responsibility for executed works can be accepted on the basis of this documentation. We therefore recommend to carry out own tests on the spot. All our deliveries are subject to the General Terms and Conditions for the members of the Netherlands Association of Rubber and Plastics Manufacturers ("Nederlandse Vereniging van Rubber- en Kunststoffabrikanten").



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product name 70-05A Series - Various Colors
MSDS name 70-05A Product Series - Various Colors
Product name(s) covered See Section 16 for Product Names Covered.
CAS # Mixture
Generic description Sealant
Manufacturer Bostik, Inc.
11320 Watertown Plank Rd
Wauwatosa, WI 53226 USA
24 hour emergency assistance Telephone: 1-800-227-0332
(Outside U.S.) 1-703-527-3887
General assistance Telephone: 1-800-843-0844
MSDS assistance Telephone: 1-800-843-0844

2. Hazards Identification

Emergency overview Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. Methyl alcohol is formed during curing. Provide ventilation adequate to control vapor exposure within inhalation guidelines when handling.

Potential health effects

Eyes This product may cause irritation to the eyes.

Skin This product may cause irritation to the skin.

Inhalation This product may cause irritation to the respiratory system. Methyl alcohol is formed during curing. Use with adequate ventilation. Repeated inhalation may be harmful; lung irritation and serious central nervous system disorders may result. Inhalation of vapours in high concentration can cause narcotic effects and metabolic acidosis.

Ingestion Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion of this product may result in central nervous system effects including headache, sleepiness, dizziness, slurred speech and blurred vision. Small amounts of this product, if aspirated into the lungs, may cause mild to severe pulmonary injury.

Target organs Central nervous system. Kidneys and Liver.

Signs and symptoms Inhalation of Methyl alcohol vapors in high concentrations may cause nausea, abdominal pain, vomiting, headache, dizziness, shortness of breathe, weakness, fatigue, leg cramps, restlessness, confusion, drunken behavior, visual disturbances, drowsiness, coma, and death. Visual effects may include blurred vision, diplopia, changes in color perception, restriction of visual fields, and complete blindness. Ingestion of moderate quantities of Methyl alcohol produces metabolic acidosis. Onset of symptoms may be delayed up to 48 hours. OSHA has established a PEL of 200 ppm, 8 hour TWA. Provide ventilation adequate to control vapor exposure within inhalation guidelines when handling.

3. Composition / Information on Ingredients

Hazardous components	CAS #	Percent
Stearic acid	57-11-4	1 - 5
Methyl alcohol	67-56-1	< 3

Composition comments Methyl alcohol can be formed through hydrolysis and be released during the curing process.

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention or advice.

Skin contact For skin contact flush with large amounts of water while removing contaminated clothing. If skin irritation persists, call a physician.

Inhalation	If inhaled, immediately remove the affected person to fresh air. Call a physician if symptoms develop or persist.
Ingestion	If the material is swallowed, get immediate medical attention or advice. Do not induce vomiting without medical advice. Never give anything by mouth to a victim who is unconscious or is having convulsions.
Notes to physician	Provide general supportive measures and treat symptomatically. Contact Bostik to determine whether any additional information is available. If overexposure to the solvents in this product is suspected, testing should include nervous system and brain effects including recent memory, mood, concentration, headaches and altered sleep patterns. Liver and kidney function should be evaluated. This material, if aspirated into the lungs, may cause chemical pneumonitis; treat the affected person appropriately.

5. Fire Fighting Measures

Hazardous combustion products	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Extinguishing media	
Suitable extinguishing media	Dry chemical, foam, carbon dioxide, water fog.
Fire fighting equipment/instructions	Firefighters should wear full protective clothing including self contained breathing apparatus.
Flash point	> 200 °F (> 93.3 °C)

6. Accidental Release Measures

Emergency action	Wear appropriate personal protective equipment. Do not allow product to enter sewer or waterways. Follow all Local, State, Federal and Provincial regulations for disposal. Regulations vary. Consult local authorities before disposal.
Spill or leak procedure	Scrape up material and place in steel drums that are in good condition. Thoroughly clean area where spill occurred. Remove sources of ignition. Ventilate area of spill.
Containment procedures	Stop source of leak if possible. Contain the discharged material.
Reporting	See Federal reporting requirements listed in Section 15. We recommend you contact local authorities to determine if there may be other local reporting requirements.

7. Handling and Storage

Handling	Do not get this material in your eyes, on your skin, or on your clothing. Avoid breathing vapors or mists of this product. Wash hands after handling and before eating.
Storage	Keep in a dry, cool and well-ventilated place. Keep away from heat. Keep away from direct sunlight. Do not handle or store near an open flame, heat or other sources of ignition.
Empty container precaution	Attention! Follow label warnings even after container is emptied since empty containers may retain product residues. Do not reuse empty container without professional cleaning for food, clothing, or products for human or animal consumption, or where skin contact can occur.

8. Exposure Controls / Personal Protection

Engineering controls	Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product. Explosion proof exhaust ventilation should be used. Methyl alcohol is formed during curing. Methyl alcohol vapors are toxic and flammable so special ventilation may be needed.
Personal protective equipment	
Eye protection	Wear safety glasses with side shields.
Skin and body protection	Use impervious gloves. Work clothing sufficient to prevent all skin contact should be worn, such as coveralls and long sleeves.
Respiratory protection	If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection. Use supplied-air respiratory equipment as required.
General	Eyewash fountains and emergency showers should be readily available.

Additional exposure data

US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3 & ppm

Methyl alcohol 67-56-1 METHANOL 200 PPM

US OSHA Table Z-1-A: Time Weighted Average (TWA): mg/m3 & ppm

Methyl alcohol 67-56-1 METHYL ALCOHOL 260 MGM3 - 200 PPM

9. Physical & Chemical Properties

Target solids	100 %
Density	1.515 g/cc
Odor	Negligible
Color	Various
Physical state	Paste
Freeze protect	No
VOC (Volatile Organic Compounds)	< 30 g/l

10. Chemical Stability & Reactivity Information

Hazardous reactions/decomposition products	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Hazardous polymerization	Will not occur.
Conditions to avoid	Avoid Strong Acids. Keep away from sources of ignition.
Stability	This is a stable material.

11. Toxicological Information

Carcinogenicity If this product contains any carcinogens, they will be noted below:

Sensitization to material

US ACGIH Threshold Limit Values: Skin designation

Methyl alcohol 67-56-1 Can be absorbed through the skin.

12. Ecological Information

Ecotoxicological information No data available for this product.

13. Disposal Considerations

It is the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable local, state and federal regulations.

Waste disposal Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. Empty containers must be handled with care due to product residue. Do not heat or cut empty container with electric or gas torch.

14. Transport Information

DOT

Not regulated as hazardous goods.

IATA

Not regulated as hazardous goods.

IMDG

Not regulated as hazardous goods.

15. Regulatory Information

This MSDS is prepared and distributed pursuant to the Federal Hazard Communication Standard, 29 CFR 1910.1200

Federal regulations

All components are on the U.S. EPA TSCA Inventory List.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Methyl alcohol

67-56-1

METHANOL US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

State regulations

If this product contains any California Proposition 65 chemicals at reportable levels they will be listed below:

Methanol

Restriction of Hazardous Substances (RoHS)

The product(s) covered by this (M)SDS do not contain or are under the prescribed levels of prohibited substances listed under 2011/65/EU Hazardous Substances Restricted or Prohibited in Electrical Equipment, including lead (CAS # 7439-92-1), mercury (CAS # 7439-97-6), cadmium (CAS # 7440-43-9), hexavalent chromium (CAS # 7440-47-3), polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE).

International regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and contains all the information required by the Controlled Products Regulations.

Substances of Very High Concern (SVHC)

The product(s) covered by this (M)SDS include one or more of the substances above a concentration of 0.1% weight by weight (w/w) in the Candidate List of Substances of Very High Concern (SVHC) for authorization published or proposed by ECHA on the following dates:

- October 28, 2008
- August 31, 2009
- January 13, 2010
- March 8, 2010
- June 18, 2010
- October 14, 2010
- December 15, 2010
- June 20, 2011
- December 19, 2011
- February 17, 2012
- June 18, 2012
- December 19, 2012
- June 20, 2013
- December 16, 2013
- June 16, 2014
- December 17, 2014

HMIS Ratings

Health: 2*

Flammability: 1

Physical hazard: 0

Personal protection: X

SARA 311/312 HAZARD CATEGORIES

Immediate Hazard - Yes

Delayed Hazard - Yes

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No

WHMIS status

Controlled

WHMIS labeling**WHMIS classification**

D2B - Other Toxic Effects-TOXIC

16. Other Information**Product name(s) covered**

A63900 - 70-05A BLACK
A63913 - 70-05A BLACK S/P 12/400ML
A63921 - 70-05A BLACK S/PK 12/20.0
A64213 - 70-05A WHITE S/P 12/400ML
A64221 - 70-05A WHITE S/PK 12/20.0
A64912 - 70-05A LIGHT GRAY S/P 24/10.0
A64921 - 70-05A LIGHT GRAY S/P 12/20.0

A65200 - 70-05A GRAY
A65200-7C - 70-05A GRAY 5GL
A65200-95 - 70-05A GRAY 52GL
A65216 - 70-05A GRAY CTG 12/290ML

Disclaimer

The data in this MSDS has been compiled from publicly available sources. This data relates only to the designated product and not to the use of said product in combination with other materials. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Responsibility for proper precautions and safe use of the product lies with the user. All data in this MSDS is typical of the product as a whole, and does not represent any individual lot or batch, therefore, Bostik, Inc. makes no warranty about the accuracy of the data herein and assumes no liability for the use of such data. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.

Further information

If there are any characters following an individual item number, they are just designations for the various types of packaging that are available for this product. For example, a product "G12345-XX" is item number "G12345" with a packaging designation of "XX". These characters do not indicate a different product nor a different regulatory, health, safety and/or environmental status. This document covers the item numbers listed above for all of their packaging types.

Issue date

01/20/2015

Prepared by

Bostik, Inc. Regulatory Affairs

Supersedes

08/14/2012

**This data sheet contains
changes from the previous
version in section(s):**

Exposure Controls / Personal Protection: Respiratory protection
Regulatory Information: Substances of Very High Concern (SVHC)
Regulatory Information: Restriction of Hazardous Substances (RoHS)